

A Study on Return on Investment of Worker Training and Development in Manufacturing Company

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ABSTRACT

In today's fast-paced competitive manufacturing industry, training and development of employees have become strategic resources and not operational costs. While training is critical in providing the workforce with technical competencies, safety knowledge, and teamwork, organizations fail to notice the significance of monitoring the financial return on investment in training. This research examines the Return on Investment (ROI) of employee training and development in a manufacturing firm with emphasis on how formal learning programs result in quantifiable business returns such as productivity improvement, fewer errors, and improved retention. Through qualitative and quantitative factor study, the research seeks to determine the irrefutable connection between training activities and organizational growth.

KEYWORDS: Employee Development, Training Programs, ROI, Human Capital Development, Manufacturing Sector, Performance Measurements, Productivity, Competency Building, Strategic HRM, Learning & Development

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INTRODUCTION

Production nowadays is done in an environment of high-technology changes and changing customer requirements. In such a situation, an extremely talented and adaptable workforce is the demand of the time. Training and development (T&D) initiatives are required to make workers not only aware of new technologies but also more productive and job-satisfied. Spending on T&D alone, without measuring its return, can prove to be cost-inefficient. The ROI in training concept provides a structured method to determine the financial returns gained from training programs in relation to the cost. This article emphasizes the importance of measuring training ROI in manufacturing, necessitating the use of a strategic approach by HR professionals.

Objectives of the Study: The main objectives of this study are to understand the efficacy of existing training programs, evaluate their return on employees' performance, and establish the financial ROI. The study also aims at investigating the perception of employees regarding training returns and

recommending the improvement of training effectiveness and return.

Literature Review: Different studies have highlighted the significance of training in organizational development and employee performance. An example of such a study is Jack Phillips' ROI method, which employs a five-level measurement model that measures training benefits from participant reactions to return on investment. One study by the American Society for Training and Development shows that companies that spend more on training have 24% higher profit margins. Kirkpatrick Model is also an effective model to use when measuring the effectiveness of training, i.e., behavioral change and results. These models show that training enhances knowledge and skills but measuring ROI ensures business results.

Research Methodology: The study utilizes a mixed-method approach involving primary and secondary data. Primary data were gathered through structured questionnaires and interviews conducted among

employees and HR managers of a mid-sized manufacturing company. Secondary data included organizational training records, industry reports, and academic literature. ROI was calculated using the following formula: $ROI = (\text{Net Training Benefits} / \text{Training Costs}) \times 100$. Performance metrics such as quality of output, production time, and staff turnover rates were measured pre- and post-training to assess impact.

Findings and Discussion: During the study, it was established that training courses which focused on technical skills and safety protocols provided the best ROI. Workers revealed increased confidence, reduced downtime, and fewer operational defects. Further, teams which completed leadership and soft skills training showed improved team work and improved morale. Quantitative data showed a 15% increase in productivity and 10% fewer wastes following the training. Employees were also satisfied with training content and presentation, but some reported having more personalized learning routes. Findings validate the reality that effective training programs make not just a difference in the form of individual enhancement but also make a positive impact on the firm's bottom line.

Measuring ROI: While the benefits are obvious, measuring ROI for training is made difficult by isolating training effects from other influences, measuring intangible benefits like employee satisfaction, and measuring on a frequent basis. In most cases, the lack of pre-training baselines and follow-up measurements limits accurate measurement. The study highlights integrating ROI measurement into the training cycle and developing a data-driven training culture.

Conclusion: The conclusion of the study is that training and development are not support functions

but necessary investments that drive operational performance and competitive edge in manufacturing companies. Measured from an ROI standpoint, training programs prove their strategic worth. Organizations with robust evaluation systems and align training with business results can expect substantial returns in the form of productivity, employee engagement, and cost savings. HR functions must drive the shift to outcome-based learning strategies from activity-based training.

Recommendations: To ensure that ROI is optimized, manufacturing companies should:

1. Link training goals to business objectives.
2. Utilize ROI calculation models to quantify program impact.
3. Integrate staff feedback into training design.
4. Conduct pre- and post-training performance assessments.
5. Use technology for customized and scalable learning.
6. Foster a continuously learning and monitoring culture.

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